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(71) Applicant (for all designated States except US): **BTG PULP & PAPER SENSORS AB** [SE/SE]; Box 602, S-661 29 Säffle (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LUNDBERG, Peter** [SE/SE]; Brånasmedsgatan 5, S-662 33 Åmål (SE). **KULLANDER, Joakim** [SE/SE]; Kalvhagen, Enebacken, S-661 91 Säffle (SE).

(74) Agent: **STRANDIN, Helene**; Bergenstråhle & Lindvall AB, Box 17704, S-118 93 Stockholm (SE).

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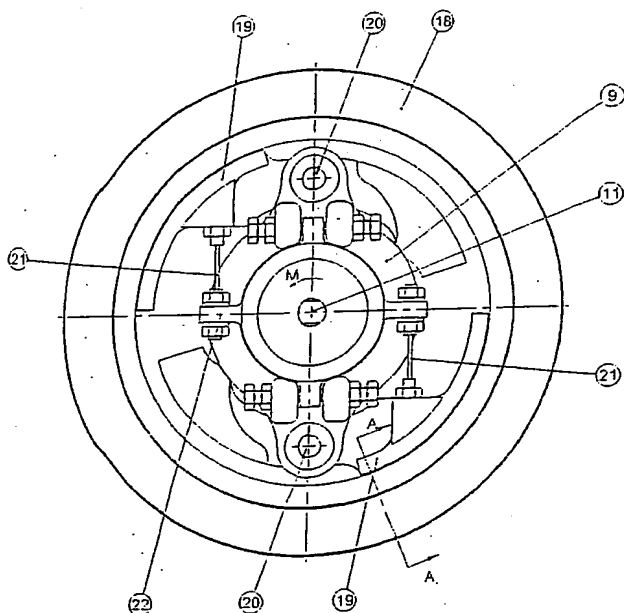
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(54) Title: **DEVICE FOR A TORQUE OR SHEAR FORCE TRANSMITTER FOR THE DETERMINATION OF FIBRE CONCENTRATION OR VISCOSITY IN PULP SUSPENSIONS AND METHOD FOR RESETTING OF THE TRANSMITTER SHAFT IN A TORQUE OR SHEAR FORCE TRANSMITTER**



(57) Abstract: Device for a torque or shear transmitter for determination of fibre concentration or viscosity in pulp suspensions and which is adapted to measure an angle deviation between two concentric shafts (9, 11) whereby the arisen angle deviation forms a function of the torque applied on the measuring body (5). The device comprises a feedback system for bringing the inner shaft or measuring shaft (11) to take a zero position independent of the magnitude of the torque, and which system comprises an electromagnetic feedback coil (18), which encircles two pole shoes (19) journaled in bearing points (20) at the end of the outer shaft in the form of a hollow shaft (9), at the same time as each pole shoe (19) is connected to the measuring shaft (11), whereby a current, generated by means for a transducer (12) and is dependent on the present angle deviation, is sent to the winding (23) of the coil (18), where a magnetic field of force (25) is generated, whose strength is determined by the current flowing through the coil (18) and the distance (24), which arises between the pole shoes (19) and the magnetic parts of the feedback coil, which latter obtain different polarity and provides a resetting of the pole shoes (19) together with the measuring shaft (11) to a present set point at the same time as the magnitude of the current is a measure of the present shear force torque and is convertible to a

suitable output signal.